

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/672,814	09/29/2000		Lin Lin	91436-256 2246		
22463	7590	10/03/2002				
SMART AN			EXAMINER			
438 UNIVER SUITE 1500 I			STORM, DONALD L			
TORONTO, (CANADA	ON M50	G2K8	ART UNIT	PAPER NUMBER		
				2654	. 1	
				DATE MAILED: 10/03/2002 .		

Please find below and/or attached an Office communication concerning this application or proceeding.

					/_				
v	-	Application No.	_	Applicant(s)	J				
		09/672,814		LIN ET AL.					
	Office Action Summary	Examiner		Art Unit					
		Donald L. Storm	1	2654					
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cove	r sheet with the c	orrespondence a	ddress				
THE I - Externanter - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reproperiod for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutely received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, how oly within the statutory min will apply and will expire e, cause the application t	ever, may a reply be tim nimum of thirty (30) day: SIX (6) MONTHS from o become ABANDONE	nely filed s will be considered time the mailing date of this O (35 U.S.C. § 133).					
1)🖂	Responsive to communication(s) filed on Se	<u>ptember 29, 2000</u>	through Novem	<u>ber 30, 2000</u> .					
2a) <u></u>	This action is FINAL . 2b)⊠ T	his action is non-f	inal.						
3)□ Dispositi	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims								
4)⊠	Claim(s) 1-21 is/are pending in the applica	tion.							
!	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	Claim(s) is/are allowed.								
6)⊠	S)⊠ Claim(s) <u>1-21</u> is/are rejected.								
7) 🗆	7) Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restriction and/o	or election require	ment.						
Applicati	on Papers								
9)□ .	The specification is objected to by the Examine	er.							
10)⊠	10)⊠ The drawing(s) filed on <u>29 September 2000</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) 🗌	The oath or declaration is objected to by the E	xaminer.							
Priority u	ınder 35 U.S.C. §§ 119 and 120								
13) 🗌	Acknowledgment is made of a claim for foreig	n priority under 3	5 U.S.C. § 119(a)-(d) or (f).					
a)[☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documen	ts have been rece	eived.						
	2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.									
14)□ A	acknowledgment is made of a claim for domest	tic priority under 3	5 U.S.C. § 119(e) (to a provision	al application).				
а) The translation of the foreign language pracknowledgment is made of a claim for domes	ovisional applicat	on has been rec	eived.	·				
Attachmen	t(s)								
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 2 . 6)		(PTO-413) Paper N Patent Application (P					
U.S. Patent and T PTO-326 (Re		Action Summary		Part of F	Paper No.				

DETAILED ACTION

Claim Informalities

1. Claim 1 is objected to because the phrase "said particular speaker" (lines 5-6) needs clarification. No particular speaker was previously said. Although the particular user was credited with speech to define the SD word models, it is not clearly recited that the particular user is said particular speaker. To advance prosecution and evaluate prior art, the Examiner has interpreted this phase to refer to --said particular user--.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Vysotsky

- 3. Claims 2, 6, 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Vysotsky et al [U. S. Patent 5,719,921].
- 4. Regarding claim 6, <u>Vysotsky</u> [at abstract] describes a method, in a speech recognition system, comprising:

providing a set of user-independent (UI) models [at column 6, lines 16-22, as speaker independent templates stored in the recognizer];

of words [at column 7, lines 47-48, as whole word models as the basis for recognition];

the models derived from utterances of a plurality of speakers [at column 7, lines 57-59, as utterances spoken by a plurality of individuals];

providing a set of user-dependent (UD) models for ones of a plurality of users [at column 6, lines 5-6, as customer dependent speech templates are retrieved to the speech recognizer];

that are word models [at column 7, lines 47-48, as whole word models as the basis for recognition];

each (model) derived from utterances of one of the users [at column 8, lines 56-59, as speaker dependent model generation requires two repetitions by the customer];

matching an utterance to one of the UI word models [at column 8, lines 10-12, as likelihood of a match to a command, function, or service template];

for the utterance from one of the users [at column 6, lines 25-27, as speech to the recognizer from the customer's speaking];

matching another utterance from the same user [at column 10, lines 59-61, as the customer's additional speech input];

to one of the UD word models [at column 10, lines 64-66 and column 8, lines 13-16, as speaker dependent speech recognition (SDR) performed on the speech by speaker dependent templates].

5. Claim 2 is set forth with limitations similar to claim 6, where the second word models correspond to SD templates and the first word models correspond to SI templates. <u>Vysotsky</u> describes those limitations as indicated there. <u>Vysotsky</u> also describes additional limitations as follows:

storing the SI models and the SD models [at column 6, lines 5-19, as speech recognizer array and database with customer dependent templates and speaker independent templates];

the SI models are used to match a word in an utterance of any user with a word model in the SI set [at column 2, lines 33-37, as SI templates are used to identify commands by a plurality of customers];

recognizing words in the particular user's utterance is by attempting to match utterance portions of an audio signal [at column 7, lines 26-49, as whole word or sub-word SD and SI recognitions of processed, received speech].

6. Regarding claim 10, <u>Vysotsky</u> [at abstract] describes a method, in a speech recognition system, comprising:

storing a first set of recognition models for recognizing speech independent of the identity of a user [at column 6, lines 16-22, as speaker independent templates stored in the recognizer];

for recognizing a plurality of system commands [at column 6, line 39-column 7, line 10, as SI recognition of explicit commands used to invoke or cancel various functions and/or services];

storing a second set of recognition models for recognizing speech of a particular user [at column 6, lines 5-19, as speech recognizer array and database with customer dependent speech templates];

at least one model of the second set for initiating performance of at least one of the plurality of system commands so that a least one of the system commands may be performed in response to a recognized utterance [at column 2, lines 29-58, as SD speech templates of names issue an implicit command to dial];

that is a user-chosen utterance [at column 8, lines 55-59, as the name spoken by the customer is added to the directory as an SD model].

7. Claim 12 is set forth including the limitations of claim 10. <u>Vysotsky</u> describes those limitations as indicated there. <u>Vysotsky</u> also describes:

comparing each model of the second set to each of the first set and others of the second set [at column 8, lines 64-66, as perform a recognition pass during training & at column 7, lines 8-11, as SI recognition of commands and SD recognition of name from the personal directory are performed in parallel];

to ensure that speech recognized using each model in the second set will not be mistakenly recognized using any model in the first set or other models in the second set [at column 8, lines 61-64, as determine if the name is too similar to another name to reduce the risk that the name will be misrecognized];

prior to storing each model [at column 8, lines 55-58, as while the name to be added is being generated in the maintenance mode].

8. Claim 13 is set forth with limitations similar to claim 10, where the second word models correspond to SD templates and the first word models correspond to SI templates. <u>Vysotsky</u> describes those limitations as indicated there. <u>Vysotsky</u> also describes additional limitations as follows:

controlling operation of a voice messaging system [at column 2, lines 63-64, as detected commands provide message retrieval services];

memory storing the SI models and the SD models [at column 6, lines 5-19, as speech recognizer array and database with customer dependent templates and speaker independent templates]; and

the first set of models are word models [at column 7, line 3, as speaker independent name or command].

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Vysotsky and Das

- 11. Claims 3-4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vysotsky et al. [U. S. Patent 5,719,921] in view of <u>Das</u> et al. [U. S. Patent No. 4,618,984].
- 12. Claim 7 is set forth including the limitations of claim 6. <u>Vysotsky</u> describes those limitations as indicated there. <u>Vysotsky</u> [at column 7, lines 51-53] also describes that training to create the recognition models occurs prior to performing recognition; therefore, <u>Vysotsky</u>'s

description assumes that the customer has registered templates and other information before the current session. <u>Vysotsky</u> assumes the customer's registered information available in the database.

<u>Vysotsky</u> does not explicitly describe how to deal with a user whose information is not available because the user is a new customer. <u>Vysotsky</u> [at column 11, lines 65-67] only describes that appropriate action is taken when a user cannot be recognized.

<u>Das</u> describes creating user dependent speech recognition models and describes a way to interact with new user, including:

inviting a user to speak training words [at column 5, line 59, as prompting the user to recite the utterance again];

who is a new user [at column 3, lines 57-58, as a talker who is a subsequent talker];

for deriving a set of UD word models [at column 5, lines 60-62, as the stack vocabulary item that matches the utterance];

deriving the set of UD models from training words[at column 5, lines 59-65, as the user provides a new appropriate prototype keyword candidate];

storing them [at column 5, lines 43-44, as inputs that fulfill a criteria replace the prototype].

Both <u>Vysotsky</u> and <u>Das</u> describe the user independent and user dependent speech recognition models. <u>Das</u> [at column 1, lines 18-20] also recognizes <u>Vysotsky</u>'s postulate that utterance recognition systems require the prior establishment of speaker dependent vocabulary items for each speaker. <u>Das</u> [at column 2, lines 66-68], however, points out that there is an advantage to omitting vocabulary training under conditions when there are no recognition errors. It would have been obvious to one of ordinary skill in the art of speech recognition at the time that

the invention was made to include Das's concept of inviting a new user to speak and register recognition models for misrecognized words in Vysotsky's recognition model enhancement method because Das [at column 3, lines 37-40] points out that this eliminates the need for establishing a vocabulary of speech recognition models for each talker.

13. Claim 8 is set forth including the limitations of claims 6-7. <u>Vysotsky</u> describes those limitations as indicated there. Vysotsky [at column 7, lines 51-53] also describes that training to create the recognition models occurs prior to performing recognition. <u>Vysotsky</u>'s description assumes that the customer has registered templates and other information before the current session. Vysotsky assumes the customer's registered information available in the database.

Vysotsky does not explicitly describe how to deal with a user whose information is not available because the user is a new customer. Vysotsky [at column 11, lines 65-67] only describes that appropriate action is taken when a user cannot be recognized.

Das describes creating user dependent speech recognition models and describes a way to interact with new user, including:

inviting a user to speak training utterances of a word [at column 5, lines 52-60, as prompting the user to indicate which stacks vocabulary item was uttered, but unrecognized, and prompting the user to recite the utterance again];

who is a new user [at column 3, lines 57-58, as a talker who is a subsequent talker]; upon a predetermined number of failures to identify the word among the UI models [at column 5, lines 36-40, as when the prototype word is misrecognized, the system identifies the misrecognition];

when no model for the word is present in the UD models[at column 5, lines 52-58, as the word equivalent to the misrecognized utterance is not in the stack of vocabulary items choices related to the words just before the mistake recognition];

deriving a word model for the training utterances [at column 5, lines 59-65, as the user provides a new appropriate prototype keyword candidate];

storing it in the set of UD models [at column 5, lines 43-44, as inputs that fulfill a criteria replace the prototype].

Both <u>Vysotsky</u> and <u>Das</u> [at column 1, lines 18-20] also recognizes <u>Vysotsky</u>'s postulate that utterance recognition systems require the prior establishment of speaker dependent vocabulary items for each speaker. <u>Das</u> [at column 2, lines 66-68], however, points out that there is an advantage to omitting vocabulary training under conditions when there are no recognition errors. It would have been obvious to one of ordinary skill in the art of speech recognition at the time that the invention was made to include <u>Das</u>'s concept of inviting a new user to speech and register recognition models for misrecognized words in <u>Vysotsky</u>'s recognition model enhancement method because <u>Das</u> [at column 3, lines 37-40] points out that this eliminates the need for establishing a vocabulary of speech recognition models for each talker.

14. Claim 9 is set forth including the limitations of claims 6-8. <u>Vysotsky</u> and <u>Das</u> describe and make obvious those limitations as indicated there. <u>Vysotsky</u> also describes:

the UD word models are stored in a separate memory location from the UI word models [at column 6, lines 16-19 and column 6, lines 1-3, as SI templates stored locally or in the data base and customer dependent templates in the database].

- 15. Claim 3 is set forth including the limitations of claim 2 and with additional limitations similar to limitations set forth in claim 7. <u>Vysotsky</u> and <u>Das</u> describe and make obvious those limitations as indicated there.
- 16. Claim 4 is set forth including the limitations of claim 2 and with additional limitations similar to limitations set forth in claim 8. <u>Vysotsky</u> and <u>Das</u> describe and make obvious those limitations as indicated there, where the second word models correspond to SD templates and the first word models correspond to SI templates.

Vysotsky and Salazar

- 17. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Vysotsky</u> et al [U.S. Patent 5,719,921] in view of <u>Salazar</u> et al. [US Patent 5,774,841].
- 18. Claim 5 is set forth including the limitations of claim 2. <u>Vysotsky</u> describes those limitations as indicated there, where the second word models correspond to SD templates and the first word models correspond to SI templates. <u>Vysotsky</u> also describes:

determining a likelihood of recognizing a spoken word using the first set [at column 8, lines 1-12, as indicate likelihood of a speaker independent match to a command, function, or service template]; and

storing and adapted word model in the set of UD models [at column 5, lines 43-44, as inputs that fulfill a criteria replace the prototype].

Part of <u>Vysotsky</u>'s [at column 10, lines 7-9] arbitration process uses a measure of confidence that the result returned by the SI recognition represents the spoken input. <u>Vysotsky</u>'s description assumes that the recognition result was recognized without difficulty because it is the most likely match to the input. Since all of <u>Vysotsky</u>'s training occurs at registration, <u>Vysotsky</u> does not explicitly consider retraining the acoustic model if the recognition is returned with low confidence. That is, <u>Vysotsky</u> does not explicitly describe using a marginally recognized spoken word to derive a word model.

<u>Salazar</u> [at abstract] describes a method in a speech recognition system that also returns a confidence measure of the recognition result, as does <u>Vysotsky</u>. <u>Salazar</u> also describes:

a spoken word marginally recognized [at column 14, line 50, as a word spoken recognized with low confidence];

using the first set [at column 13, line 65, as compared to the vocabulary currently active]; and using that spoken word [at column 11, lines 41-42, as stored, raw digital voice from spoken commands];

to derive a word model [at column 15, line 3, as adapt the word for the adaptation update]; and

storing it in the second set [at column 15, lines 3-9, as place the update in RAM, not in permanent storage].

Salazar [at column 4, lines 1-34] points out that even though recognition results are returned, the spoken input might have been a problem for the recognizer, and that retraining the recognizer as-needed can reduce recognitions failures. In view of Salazar's recognition of problem words, but also with treatment to reduce problems with recognizing the word, it would have been obvious to one of ordinary skill in the art of speech recognition at the time of invention

to include <u>Salazar</u>'s concept of retraining words that provide low-confidence recognition results with <u>Vysotsky</u>'s system because provide current models of the word as spoken by the current user to increase accurate recognition results.

Vysotsky and Firman

- 19. Claims 1, 11, and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vysotsky et al [U. S. Patent 5,719,921] in view of Firman [US Patent 5,377,303].
- 20. Claim 1 is set forth with limitations similar to claim 2. <u>Vysotsky</u> describes those limitations as indicated there. <u>Vysotsky</u> [at columns 4-5] also generally describes suitable hardware for voice recognition in an intelligent telephone switch system. <u>Vysotsky</u> also describes: storing the SI models and the SD models [at column 6, lines 5-19, as speech recognizer

array and database with customer dependent templates and speaker independent templates].

<u>Vysotsky</u>, however, does not explicitly describe a computer memory and stored computer program.

<u>Firman</u> [at abstract] also describes a speech recognition system for converting utterances into commands for system control, and <u>Firman</u> describes:

computer memory storing a program portion to identify words in utterances [at column 7, lines 55-64, as a hard disk and RAM for operating voice control software].

To the extent that a computer memory and program are not innately part of <u>Vysotsky</u>'s system, the many teachings of <u>Vysotsky</u> make it obvious to one of ordinary skill in the art of automatic speech recognition at the time of invention to provide software program portions and templates stored in computer memory to accomplish the speech recognition as <u>Firman</u> does,

because machines could be used with stored program segments in accordance with <u>Firman</u>'s teachings because programmed computer implementation would eliminate manual calculation of repetitive operations.

21. Claim 11 is set forth including the limitations of claim 10. <u>Vysotsky</u> describes those limitations as indicated there, where the second word models correspond to user chosen names and cause the system to dial a call.

<u>Vysotsky</u>, however, does not explicitly describe a series of commands corresponding to a single utterance.

<u>Firman</u> [at column 6, lines 63 ff.] also describes a method in a speech recognition system wherein user-dependent templates initiate system commands, and <u>Firman</u> describes:

a single utterance corresponding to one of the second set of models may correspond to a plurality of sequentially performed system commands [at column 9, lines 29-36, as the selected utterance name is associated with the command string series of desired actions].

To the extent that <u>Vysotsky</u>'s user-dependent commands for dialing do not innately correspond to a series of commands to place the call, it would have been obvious to one of ordinary skill in the art of system control by voice commands at the time of invention to include <u>Firman</u>'s concept of associating a series of system commands with UD templates during training because <u>Vysotsky</u> provides a plurality of system commands for various functions and services that must be performed to complete the service that the user requests.

22. Claim 14 is set forth including the limitations of claim 13. <u>Vysotsky</u> describes those limitations as indicated there. <u>Vysotsky</u> also describes:

adapting the system to record utterances by the user to form the second set [at column 8, lines 55-59, as in directory maintenance mode, add repetitions of a name spoken by the customer for a SD model].

<u>Vysotsky</u>, however, does not explicitly describe a memory containing computer executable instructions collected by the system and associated with an utterance.

<u>Firman</u> [at abstract] also describes a speech recognition system for converting utterances into commands for system control, and <u>Firman</u> describes:

memory containing computer executable instructions [at column 7, lines 55-64, as a hard disk and RAM for operating voice control software];

adapting the system to record utterances by the user to form the second set [at column 8, lines 22-40, as in a training mode, store digitized samples of the utterance name spoken by the user to create a macro representing the utterance in the voice file];

and to collect indicators of system commands to be associated with each model in the second set[at column 9, lines 15-36, as in a record mode, associate a series of actions performed by the user with an utterance name].

To the extent that a computer memory and program are not innately part of <u>Vysotsky</u>'s system, the many teachings of <u>Vysotsky</u> make it obvious to one of ordinary skill in the art of automatic speech recognition at the time of invention to provide software program portions and templates stored in computer memory to accomplish the speech recognition and training as <u>Firman</u> does, because machines could be used with stored program segments in accordance with <u>Firman</u>'s teachings because programmed computer implementation would eliminate manual calculation of repetitive operations.

To the extent that <u>Vysotsky</u>'s user-dependent commands for dialing do not innately correspond to a series of commands to place the call, it would have been obvious to one of ordinary skill in the art of system control by voice commands at the time of invention to include <u>Firman</u>'s concept of associating a series of system commands with <u>UD</u> templates during training because <u>Vysotsky</u> provides a plurality of system commands for various functions and services that must be performed to complete the service that the user requests.

23. Claim 15 is set forth including the limitations of claims 13-14. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there. <u>Firman</u> also describes:

the system prompts a user to record utterance in place of system commands [at column 8, lines 25-50, as the Recognizer software displays a menu to be recognized and prompts a user to speak an utterance corresponding to command strings].

- 24. Claim 16 is set forth including the limitations of claims 13-14 and with additional limitations similar to limitations set forth in claim 12. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there.
- 25. Claim 17 is set forth including the limitations of claims 13-14 and 16, and with additional limitations similar to limitations set forth in claim 11. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there.

0.

26. Claim 18 is set forth with limitations similar to claims 10 and 15. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there. <u>Firman</u> also describes further additional limitations as follows:

a computer readable medium storing computer executable instructions [at column 7, lines 55-64, as a hard disk and RAM for operating voice control software].

- 27. Claim 19 is set forth including the limitations of claim 18 and with additional limitations similar to limitations set forth in claim 14. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there.
- 28. Claim 20 is set forth including the limitations of claims 18-19 and with additional limitations similar to limitations set forth in claim 15. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there.
- 29. Claim 21 is set forth including the limitations of claim 18 and with additional limitations similar to limitations set forth in claim 16. <u>Vysotsky</u> and <u>Firman</u> describe and make obvious those limitations as indicated there.

Double Patenting

30. Claims 1-4 and 6-7 directed to an invention not patentably distinct from claims 1-2, 4, and 6-7 of commonly assigned Application Number 09/281,078. Specifically, although the conflicting claims are not identical, they are not patentably distinct from each other because a person of ordinary skill in the art would conclude that the invention defined in the claims in issue is an

obvious variation of the invention defined in the claims commonly assigned Application Number 09/281,078.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned Application Number 09/281,078, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78(c) and 35 U.S.C. 132 to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL RESULT IN A HOLDING OF ABANDONMENT OF THE APPLICATION.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Application Number 09/281,078 is already of record as the parent application of this application. Discussion of Application Number 09/281,078 falls under the special circumstances of 35 U.S.C. § 122 permitting divulging information about an application in special circumstances. The instant application and the referenced application(s) have one or more common inventors and a common assignee, but are being prosecuted by different law firms. Evidence in the referenced

APPLICATION/CONTROL NUMBER: 09 ART UNIT: 2654

disclosure, however, can be used in a rejection against the instant application. See MPEP § 103 and § 724.05.

32. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

33. Claims 1-4 and 6-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4, and 6-7 of copending Application Number 09/281,078. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Although the conflicting claims are not identical, they are not patentably distinct from each other because a person of ordinary skill in the art would conclude that the invention defined in the claims in issue is an obvious variation of the invention defined in the claims commonly assigned Application Number 09/281,078.

34. Independent claims 1, 2, and 6, and by dependency claims 3-4 and 7, of this application are not patentably distinct from claims 1-2, 4, and 6-7 of Application Number 09/281,078 are set forth including obviously similar phrases.

However, claims 1, 2, and 6, and by dependency claims 3-4 and 7, of this application do not explicitly include Application Number 09/281,078's claimed limitations of at least an incoming signal, ascertaining a current context, attempting to identify words in the context by determining a probability, and taking appropriate action following comparison to a threshold, as recited in independent claim 1 and/or independent claim 6, and by dependency claims 2, 4, and 7 of Application Number 09/281,078.

It would have been obvious to one of ordinary skill in the art of computerized speech recognition at the time that the invention was made that claim limitations in Application Number 09/281,078 claims differ from those in the application only by functions that can be eliminated if the effect of the additional functions is unneeded or undesired. If the functionality provided by the additional limitations is not desired, it would have been obvious to eliminate it, and so achieve the advantage of simplifying the processing.

35. Similarly, it would have been obvious that the additional limitations provided by the dependent claims of Application Number 09/281,078 should not be included if their added functions are not desired because their elimination would further simplify processing.

0.

Conclusion

- 36. The following references made of record and not relied upon are considered pertinent to applicant's disclosure:
- Racine [US Patent 4,811,243] describes converting vocal commands chosen by a user into control signals to execute a series of commands to a computer.
- Borcherding [U. S. Patent No. 5,165,095] describes speech recognition using both speaker independent and speaker dependent processing.
- Wattenbarger [U. S. Patent No. 5,835,570] describes separate storage spaces for user independent and user dependent recognition patterns.
- 37. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703)872-9314, (for formal communications intended for entry)

Or:

(703)872-9314, (for informal or draft communications, and please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Storm, of Art Unit 2654, whose telephone number is

(703)305-3941. The examiner can normally be reached on weekdays between 8:00 AM and 5:00 PM Eastern Time. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703)305-4379. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office at telephone number (703)306-0377.

Donald L. Storm September 30, 2002 Marsha D. Banks-Harold supervisory patent examiner technology center 2600